



I.P.T.
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/963,827

Confirmation No.: 1175

Applicant: Sullenger *et al.*

Filed: September 26, 2001

TC/AU.: 1635

Examiner: Sean McGarry

Docket No.: 10815.105005 RBI REG001

Customer No.: 20786

Title: RNA Aptamers and Methods for Identifying the Same

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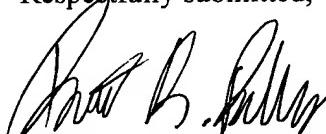
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Respectfully submitted,



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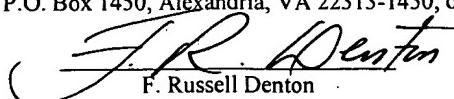
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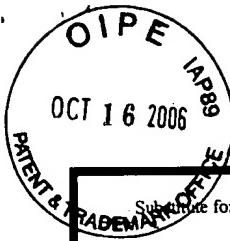
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	09/963,827
Sheet	1	of	3	Filing Date	September 26, 2001
				First Named Inventor	Sullenger et al.
				Group Art Unit	1635
				Examiner Name	Sean R. McGarry
				Attorney Docket Number	10815.105005

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U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code (if known)		
AA	5,648,214	A		Nieuwlandt, et al.	07-15-1997
AB	5,760,202	A		Cook et al.	06-02-1998
AC	5,843,653	A		Gold et al.	12-01-1998
AD	6,001,820	A		Hirsh et al.	12-14-1999
AE	6,005,087	A		Cook et al.	12-21-1999
AF	6,011,020	A		Gold et al.	01-04-2000
AG	6,083,696	A		Biesecker et al.	07-04-2000
AH	6,110,900	A		Gold et al.	08-29-2000
AI	6,117,557	A		Massie, II, et al.	09-12-2000
AJ	6,316,198	B1		Skouv et al.	11-13-2001
AK	2003-0083294	A1		Sullenger et al.	05-01-2003
AL	2006-0040881	A1		Rusconi	02-23-2006

FOREIGN PATENT DOCUMENTS					
Examiner Initials *	Cite No. ¹	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Office ³	Number		
AM	EP	0,593,901	A2	Hoechst AG	04-27-1994
AN	WO	02/026932	A2	Duke University	04-04-2002
AO	WO	02/096926	A1	Duke University	12-05-2002
AP	WO	03/093422	A2	Schering	11-13-2003

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
	AQ	BEIGELMAN, L., et al., "Chemical modification of hammerhead ribozymes. Catalytic activity and nuclease resistance," <i>J. Biol. Chem.</i> , 270(43):25702-25708 (October 25, 1995).			
	AR	BLACK, A.R., and AZIZKHAN-CLIFFORD, J., "Regulation of E2F: a family of transcription factors involved in proliferation control," <i>Gene</i> , 237(2):281-302 (September 17, 1999).			
	AS	CHASE, J.W., and WILLIAMS, K.R., "Single-stranded DNA binding proteins required for DNA replication," <i>Annu. Rev. Biochem.</i> , 55:103-136 (1986).			

Examiner Signature	Date Considered
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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet **2** of **3****Complete if Known**

Application Number	09/963,827
Filing Date	September 26, 2001
First Named Inventor	Sullenger et al.
Group Art Unit	1635
Examiner Name	Sean R. McGarry
Attorney Docket Number	10815.105005

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ^	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. T ^c
	BA	DALE, R.M., et al., "Direct covalent mercuration of nucleotides and polynucleotides," <i>Biochemistry</i> , 14(11):2447-2457 (June 3, 1975).
	BB	DAVIES, J., et al., Chap. 8, p. 185, in <i>RNA World</i> (Cold Spring Harbor Laboratory Press; eds. Gestlaad and Atkins; 1993).
	BC	DeANDA, A. Jr., et al., "Pilot study of the efficacy of a thrombin inhibitor for use during cardiopulmonary bypass," <i>Ann. Thorac. Surg.</i> , 58(2):344-350 (August 1994).
	BD	EICHORN, G.L., et al., "Interaction of metal ions with polynucleotides and related compounds. XII. The relative effect of various metal ions on DNA helicity," <i>J. Am. Chem. Soc.</i> , 90(26):7323-7328 (December 18, 1968).
	BE	FEUERSTEIN, G.Z., et al., "Antithrombotic efficacy of a novel murine antihuman factor IX antibody in rats," <i>Arterioscler. Thromb. Vasc. Biol.</i> , 19(10):2554-2562 (October 1999).
	BF	GOOD, P.D., et al., "Expression of small, therapeutic RNAs in human cell nuclei," <i>Gene Ther.</i> , 4(1):45-54 (January 1997).
	BG	GRIFFIN, L.C., et al., "In vivo anticoagulant properties of a novel nucleotide-based thrombin inhibitor and demonstration of regional anticoagulation in extracorporeal circuits," <i>Blood</i> , 81(12):3271-3276 (June 15, 1993).
	BH	HARBOUR, J.W., and DEAN, D.C., "The Rb/E2F pathway: expanding roles and emerging paradigms," <i>Genes Dev.</i> , 14(19):2393-2409 (October 1, 2000).
	BI	HELIN, K., and ED, H., "The retinoblastoma protein as a transcriptional repressor," <i>Trends Cell Biol.</i> , 3(2):43-46 (February 1993).
	BJ	HUNTER, T., "Braking the cycle," <i>Cell</i> , 75(5):839-841 (December 3, 1993).
	BK	ISHIZAKI, J., et al., "Inhibition of cell proliferation by an RNA ligand that selectively blocks E2F function," <i>Nature Med.</i> , 2(12):1386-1389 (December 1996).
	BL	LA THANGUE, N.B., "DRTF1/E2F: an expanding family of heterodimeric transcription factors implicated in cell-cycle control," <i>Trends Biochem. Sci.</i> , 19(3):108-114 (March 1994).
	BM	LEE, S.W., et al., "Isolation of a nuclease-resistant decoy RNA that can protect human acetylcholine receptors from myasthenic antibodies," <i>Nature Biotechnol.</i> , 15(1):41-45 (January 1997).
	BN	LIPPARD, S.J., et al., "Platinum complexes: probes of polynucleotide structure and antitumor drugs," <i>Acc. Chem. Res.</i> , 11:211-217 (1978).
	BO	MANN, K.G., et al., "Surface-dependent reactions of the vitamin K-dependent enzyme complexes," <i>Blood</i> , 76(1):1-16 (July 1, 1990).
	BP	NEVINS, J.R., "E2F: a link between the Rb tumor suppressor protein and viral oncoproteins," <i>Science</i> , 258(5081):424-429 (October 16, 1992).

Examiner Signature		Date Considered
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	CA	PIEKEN, W.A., <i>et al.</i> , "Kinetic characterization of ribonuclease-resistant 2'-modified hammerhead ribozymes," <i>Science</i> , 253(5017):314-317 (July 19, 1991).	
	CB	RUSCONI, C.P., <i>et al.</i> , "Blocking the initiation of coagulation by RNA aptamers to factor VIIa," <i>Thrombosis and Haemostasis</i> , 84(5):841-848 (November 2000).	
	CC	SHERR, C.J., "Mammalian G1 cyclins," <i>Cell</i> , 73(6):1059-1065 (June 18, 1993).	
	CD	SHERR, C.J., and ROBERTS, J.M., "Inhibitors of mammalian G1 cyclin-dependent kinases," <i>Genes Dev.</i> , 9(10):1149-1163 (May 15, 1995).	
	CE	SULLENGER, B.A., <i>et al.</i> , "Overexpression of TAR sequences renders cells resistant to human immunodeficiency virus replication," <i>Cell</i> , 63(3):601-608 (November 2, 1990).	
	CF	TUCKER, C.E., <i>et al.</i> , "Detection and plasma pharmacokinetics of an anti-vascular endothelial growth factor oligonucleotide-aptamer (NX1838) in rhesus monkeys," <i>J. Chromatog. B, Biomed. Sci. Appl.</i> , 732(1):203-212 (September 10, 1999).	
	CG	WEINBERG, R.A., "The retinoblastoma protein and cell cycle control," <i>Cell</i> , 81(3):323-330 (May 5, 1995).	
	CH	WHITE, R.R., <i>et al.</i> , "Developing aptamers into therapeutics," <i>J. Clin. Invest.</i> , 106(8):929-934 (October 2000).	
	CI	WILLIS, M.C., <i>et al.</i> , "Liposome-anchored vascular endothelial growth factor aptamers," <i>Bioconjug. Chem.</i> , 9(5):573-582, (September-October 1998).	
	CJ	WILLIS, M.C., <i>et al.</i> , "Liposome-anchored vascular endothelial growth factor aptamers," <i>Bioconjug. Chem.</i> , 9(5):633 (September-October 1998) [Erratum, Collins, B., corrected to Collins, B.D.].	

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